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MAY 16 2006

APPLICANTS: Doble et al.
SERIAL NO: 10/714,796

DOCKET NO: HTS-0016US.P1 (ISIS.037CP1)

AMENDMENT TO THE CLAIMS: This listing of claims replaces all prior versions and listings of claims in the instant patent application.

Listing of claims:

1. (Currently amended) An antisense compound ~~8 to 80~~ 12 to 50 nucleobases in length targeted to a nucleic acid molecule encoding kinesin-like 1 (SEQ ID NO: 3), said compound comprising at least an 8-nucleobase portion of SEQ ID NO: ~~86, 96, 116 or~~ 122, wherein said compound is specifically hybridizable with said nucleic acid molecule encoding kinesin-like 1, ~~and wherein said compound inhibits the expression of kinesin-like 1 mRNA.~~

2. (Canceled)

3. (Currently amended) The antisense compound of claim 1 which is 2 comprising 15 to 30 nucleobases in length.

4. (Original) The antisense compound of claim 1 comprising an oligonucleotide.

5. (Original) The antisense compound of claim 4 comprising a DNA oligonucleotide.

6. (Original) The antisense compound of claim 4 comprising an RNA oligonucleotide.

7. (Original) The antisense compound of claim 4 comprising a chimeric oligonucleotide.

8-12. (Canceled)

13. (Original) The antisense compound of claim 1 having at least one modified internucleoside linkage, sugar moiety, or nucleobase.

14. (Original) The antisense compound of claim 1 having at least one 2'-O-methoxyethyl sugar moiety.

15. (Original) The antisense compound of claim 1 having at least one phosphorothioate internucleoside linkage.

16. (Original) The antisense compound of claim 1 wherein at least one cytosine

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is a 5-methylcytosine.

17. (Withdrawn) A method of inhibiting the expression of kinesin-like 1 in a cell or tissue comprising contacting said cell or tissue with the antisense compound of claim 1 so that expression of kinesin-like 1 is inhibited.

18. (Withdrawn) The method of claim 17 wherein the cell or tissue is a cancer cell or cancerous tissue.

19. (Withdrawn) The method of claim 18 wherein the cancer cell or cancer tissue is derived from cancer of the breast, lung, colon, prostate, pancreas, ovary, cervix, brain, liver or kidney.

20-22. (Canceled)

23. (Original) A kit or assay device comprising the antisense compound of claim 1.

24. (Withdrawn) A method of treating an animal having a disease or condition associated with kinesin-like 1 comprising administering to said animal a therapeutically or prophylactically effective amount of the antisense compound of claim 1 so that expression of kinesin-like 1 is inhibited.

25. (Withdrawn) The method of claim 24 wherein the disease or condition is a hyperproliferative disorder.

26. (Withdrawn) The method of claim 25 wherein the hyperproliferative disorder is cancer or a tumor.

27. (Withdrawn) The method of claim 26 wherein the cancer or tumor is cancer or a tumor of the breast, lung, colon, prostate, pancreas, ovary, cervix, brain, liver or kidney.

28. (Withdrawn) The method of claim 24 wherein the disease or condition is an autoimmune disease.

29-43. (Canceled)

44. (Withdrawn) A method of modulating a cell cycle comprising contacting a cell with the compound of claim 1.

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45. (Withdrawn) The method of claim 44 wherein a percentage of cells in G2M phase is increased.

46. (Withdrawn) A method of reducing expression of kinesin-like 1 in a cell or tissue which overexpresses kinesin-like 1 comprising contacting said cell or tissue with the antisense compound of claim 1 so that expression of kinesin-like 1 is reduced.

47. (Withdrawn) The method of claim 46 wherein the cell or tissue is a cancer cell or cancerous tissue.

48. (Withdrawn) The method of claim 47 wherein the cancer cell or cancer tissue is derived from cancer of the breast, lung, colon, prostate, pancreas, ovary, cervix, brain, liver or kidney.

49. (Previously presented) The antisense compound of claim 7 wherein said chimeric oligonucleotide is a gapmer.

50. (Previously presented) The antisense compound of claim 49 comprising two regions of LNA nucleotides flanking a region of 2'-deoxynucleotides.

51. (Previously presented) The antisense compound of claim 13 comprising at least one LNA moiety.

52. (Withdrawn) A method of decreasing cell proliferation comprising contacting a cell or tissue with the antisense compound of claim 1 so that expression of kinesin-like 1 mRNA is reduced.

53. (Withdrawn) The method of claim 52 wherein said cell or tissue is a cancer cell or tissue.

54. (Withdrawn) A method of increasing apoptosis in a cell or tissue, comprising contacting said cell or tissue with an antisense compound of claim 1 so that expression of kinesin-like 1 mRNA is reduced.

55. (Withdrawn) The method of claim 54, wherein said cell or tissue is a cancer cell or tissue.

56. (Withdrawn) The method of claim 55, wherein the cancer is hepatocellular carcinoma.

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57. (Withdrawn) The method of claim 26, wherein the cancer is hepatocellular carcinoma.

58. (Withdrawn) The method of claim 47, wherein the cancerous tissue is hepatocellular carcinoma.

59. (Previously presented) The antisense compound of claim 49, comprising two regions of 2'-methoxyethyl nucleotides flanking a region of 2'-deoxynucleotides.

60. (Previously presented) The antisense compound of claim 59, wherein each region of 2'-methoxyethyl nucleotides consists of 5 nucleotides and the region of 2'-deoxynucleotides consists of 10 nucleotides.

61-67. (Canceled)

68. (Currently amended) The antisense compound of claim 1 having a nucleotide sequence consisting of SEQ ID NO: 122.

69. (New) The antisense compound of claim 1 which is 100% complementary to the nucleic acid molecule encoding kinesin-like 1.

70. (New) An antisense oligonucleotide 16, 17, 18, 19, 20, 21, 22, 23, 24 or 25 nucleobases in length targeted to a nucleic acid molecule encoding kinesin-like 1 (SEQ ID NO: 3), wherein said compound has at least 80% identity with SEQ ID NO: 122.

71. (New) The antisense oligonucleotide of claim 70 which is 18, 19, 20, 21 or 22 nucleobases in length and has at least 90% identity with SEQ ID NO: 122.

72. (New) The antisense oligonucleotide of claim 71 which is 19, 20 or 21 nucleobases in length and has at least 95% identity with SEQ ID NO: 122.